RAW SEQUENCE LISTING
PATENT APPLICATION US/09/232,290A

DATE: 03/30/2000
TIME: 13:25:08

Input Set: I232290A.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

<110> APPLICANT: PLUCKTHUN, ANDREAS
NIEBA, LARS
HONEGGER, ANNEMARIE
<120> TITLE OF INVENTION: IMMUNOGLOBULIN SUPER FAMILY DOMAINS AND FRAGMENTS WITH INCREASED SOLUBILITY
<130> FILE REFERENCE: MORPHO/7
<140> CURRENT APPLICATION NUMBER: US/09/232,290A
<141> CURRENT FILING DATE: 1999-01-15
<150> EARLIER APPLICATION NUMBER: PCT/EP96/02230
<151> EARLIER FILING DATE: 1996-05-23
<160> NUMBER OF SEQ ID NOS: 60
<170> SOFTWARE: PatentIn Ver. 2.0
<210> SEQ ID NO 1
<211> LENGTH: 113
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 1

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Asp Ile Val Met Thr Gln Ser Pro Ala Ser Leu Val Val Ser Leu Gly
 1               5                  10                  15
Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Glu Ser Val Asp Ser Tyr
            20                  25                  30
Gly Lys Ser Phe Met His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
        35                  40                  45
Lys Val Leu Ile Tyr Ile Ala Ser Asn Leu Glu Ser Gly Val Pro Ala
    50                  55                  60
Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Asp
65                  70                  75                  80
Pro Val Glu Ala Asp Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Asn Asn
                85                  90                  95
Glu Asp Pro Pro Pro Thr Phe Gly Ala Gly Thr Lys Leu Glu Met Arg
            100                 105                 110
Arg
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<210> SEQ ID NO 2
<211> LENGTH: 108
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 2

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Gln Ile Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
 1               5                  10                  15
Glu Lys Val Thr Met Thr Cys Ser Ala Ser Ser Ser Val Tyr Tyr Met
            20                  25                  30
Tyr Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Arg Leu Leu Ile Tyr
        35                  40                  45
Asp Thr Ser Asn Leu Ala Ser Gly Val Pro Val Arg Phe Ser Gly Ser
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45                50                  55                  60
46          Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
47           65                  70                  75                  80
48          Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Trp Ser Ser Tyr Pro Pro Ile
49                          85                  90                  95
50          Thr Phe Gly Val Gly Thr Lys Leu Asp Leu Lys Thr
51                      100                 105
52    <210> SEQ ID NO 3
53    <211> LENGTH: 108
54    <212> TYPE: PRT
55    <213> ORGANISM: Murine
56    <400> SEQUENCE: 3
57          Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Val Ser Val Gly
58            1               5                  10                  15
59          Glu Thr Val Thr Ile Thr Cys Arg Ala Ser Glu Asn Ile Tyr Ser Asn
60                      20                  25                  30
61          Leu Ala Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
62                  35                  40                  45
63          Tyr Ala Ala Thr Asn Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
64               50                  55                  60
65          Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Ser
66           65                  70                  75                  80
67          Glu Asp Phe Gly Ser Tyr Tyr Cys Gln His Phe Trp Gly Thr Pro Tyr
68                          85                  90                  95
69          Thr Phe Gly Gly Gly Thr Arg Leu Glu Ile Lys Arg
70                      100                 105
71    <210> SEQ ID NO 4
72    <211> LENGTH: 113
73    <212> TYPE: PRT
74    <213> ORGANISM: Murine
75    <400> SEQUENCE: 4
76          Asp Val Val Met Thr Gln Thr Pro Leu Ser Leu Pro Val Ser Leu Gly
77            1               5                  10                  15
78          Asp Gln Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
79                      20                  25                  30
80          Asn Gly Asn Thr Tyr Leu His Trp Tyr Leu Gln Lys Pro Gly Gln Ser
81                  35                  40                  45
82          Pro Lys Leu Leu Ile Tyr Lys Val Ser Asn Arg Phe Ser Gly Val Pro
83               50                  55                  60
84          Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Tyr Leu Lys Ile
85           65                  70                  75                  80
86          Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
87                          85                  90                  95
88          Thr His Val Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys
89                      100                 105                 110
90          Arg
91    <210> SEQ ID NO 5
92    <211> LENGTH: 106
93    <212> TYPE: PRT
94    <213> ORGANISM: Homo sapiens
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<400> SEQUENCE: 5
Asp Ile Gln Met Thr Gln Ser Pro Ser Thr Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Arg Trp
20 25 30
Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys Val Pro Lys Leu Leu Ile
35 40 45
Tyr Lys Ala Ser Ser Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Asp Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Ser Phe
85 90 95
Gly Pro Gly Thr Lys Val Asp Ile Lys Arg
100 105

<210> SEQ ID NO 6
<211> LENGTH: 108
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 6
Asp Ile Gln Met Thr Gln Ser Pro Ala Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Glu Thr Val Thr Ile Thr Cys Thr Ala Ser Gly Asn Ile His Asn Tyr
20 25 30
Leu Ala Trp Tyr Gln Gln Lys Gln Gly Lys Ser Pro Gln Leu Leu Val
35 40 45
Tyr Tyr Thr Thr Thr Leu Ala Asp Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Gly Ser Gly Thr Gln Tyr Ser Leu Lys Ile Asn Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Gly Ser Tyr Tyr Cys Gln His Phe Trp Ser Thr Pro Arg
85 90 95
Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile Lys Arg
100 105

<210> SEQ ID NO 7
<211> LENGTH: 109
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 7
Glu Asn Val Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
1 5 10 15
Glu Lys Val Thr Met Ala Cys Arg Ala Ser Ser Ser Val Ser Ser Thr
20 25 30
Tyr Leu His Trp Tyr Gln Gln Lys Ser Gly Ala Ser Pro Lys Leu Leu
35 40 45
Ile Tyr Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser
50 55 60
Gly Ser Gly Ser Gly Thr Ser Tyr Ser Leu Tyr Ile Ser Ser Val Glu
65 70 75 80
Ala Glu Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Tyr Ser Gly Tyr Pro

85 90 95
Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu Lys Arg
100 105

<210> SEQ ID NO 8
<211> LENGTH: 114
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 8
Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Thr Val Thr Ala Gly
1 5 10 15
Glu Lys Val Thr Met Ser Cys Lys Ser Ser Gln Ser Leu Phe Asn Ser
20 25 30
Gly Lys Arg Lys Asn Phe Leu Thr Trp Tyr His Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Leu Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Thr Ser Val Gln Ala Glu Asp Leu Ala Ile Tyr Tyr Cys Gln Asn
85 90 95
Asp Tyr Ser His Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
100 105 110
Lys Arg

<210> SEQ ID NO 9
<211> LENGTH: 108
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence: Humanized murine
<400> SEQUENCE: 9
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Asp Val Asn Thr Ala
20 25 30
Val Ala Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45
Tyr Ser Ala Ser Phe Leu Glu Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60
Ser Arg Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln His Tyr Thr Thr Pro Pro
85 90 95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
100 105

<210> SEQ ID NO 10
<211> LENGTH: 112
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 10

Asp Ile Val Leu Thr Gln Ser Pro Gly Ser Leu Ala Val Ser Leu Gly
1 5 10 15
Gln Arg Ala Thr Ile Ser Cys Arg Ala Ser Gln Ser Val Asp Asp Asp
20 25 30
Gly Asn Ser Phe Leu His Trp Tyr Gln Gln Lys Pro Gly Gln Pro Pro
35 40 45
Lys Leu Leu Ile Tyr Arg Ser Ser Asn Leu Ile Ser Gly Ile Pro Asp
50 55 60
Arg Phe Ser Gly Ser Gly Ser Arg Thr Asp Phe Thr Leu Thr Ile Asn
65 70 75 80
Asp Pro Val Glu Ala Asp Val Ala Thr Tyr Tyr Cys Gln Gln Ser Asn
85 90 95
Gln Asp Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Ile Lys Arg
100 105 110

<210> SEQ ID NO 11
<211> LENGTH: 111
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 11

Gln Ala Val Val Thr Gln Glu Ser Ala Leu Thr Thr Ser Pro Gly Glu
1 5 10 15
Thr Val Thr Leu Thr Cys Arg Ser Ser Thr Gly Ala Val Thr Thr Ser
20 25 30
Asn Tyr Ala Asn Trp Tyr Gln Glu Lys Pro Asp His Leu Phe Thr Gly
35 40 45
Leu Ile Glu Glu Thr Asn Asn Arg Ala Pro Gly Val Pro Ala Arg Phe
50 55 60
Ser Gly Ser Leu Ile Gly Asp Lys Ala Ala Leu Thr Ile Thr Gly Ala
65 70 75 80
Gln Thr Glu Asp Glu Ala Ile Tyr Phe Cys Ala Leu Trp Tyr Ser Asn
85 90 95
His Trp Val Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly
100 105 110

<210> SEQ ID NO 12
<211> LENGTH: 114
<212> TYPE: PRT
<213> ORGANISM: Murine
<400> SEQUENCE: 12

Asp Ile Val Met Thr Gln Ser Pro Ser Ser Leu Thr Val Thr Ala Gly
1 5 10 15
Glu Lys Val Thr Met Ser Cys Thr Ser Ser Gln Ser Leu Phe Asn Ser
20 25 30
Gly Lys Gln Lys Asn Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln
35 40 45
Pro Pro Lys Val Leu Ile Tyr Trp Ala Ser Thr Arg Glu Ser Gly Val
50 55 60
Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr
65 70 75 80
Ile Ser Ser Val Gln Ala Glu Asp Leu Ala Val Tyr Tyr Cys Gln Asn
85 90 95

VERIFICATION SUMMARY
PATENT APPLICATION **US/09/232,290A**

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